UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,053	02/28/2006	Raphaël Visoz	33901-194PUS	3049
27799 7590 01/21/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE			EXAMINER	
			AHN, SUNG S	
SUITE 1210 NEW YORK, NY 10176			ART UNIT	PAPER NUMBER
			2611	
			MAIL DATE	DELIVERY MODE
			01/21/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/570,053	VISOZ ET AL.			
Office Action Summary	Examiner	Art Unit			
	SUNG AHN	2611			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earmed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>06 Au</u>	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 1-15 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 2-15 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on 06 August 2004 is/are:	vn from consideration. r election requirement. r.	to by the Examiner.			
Applicant may not request that any objection to the answer Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Experience of the experience o	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

DETAILED ACTION

Drawings

1. The drawings (fig. 2, 3, and 4) are objected to because the unlabeled rectangular box(es) shown in the drawings should be provided with descriptive text labels.

Diagrammatic blocks are required to be labeled to indicate contents or function. See 37 CFR 1.83 (a), 1.84 (g). Correction is required.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/570,053 Page 3

Art Unit: 4154

Claim Objections

2. Claims 2-9 and 11-15 are objected to because of the following informalities: typographical errors. The term "A" in claims 2-9 and 11-15 should be corrected to --The--, respectively. In addition, the same typographical errors and other misspellings should be corrected in the specification. Appropriate correction is required.

- 3. Claim 9 is objected to because of the following informalities: The acronym for first "ST-BICM" needs to be spelled out when it is used first time in each independent or subsequent dependent claim. Also claim 9 should be dependent on claim 8, not claim 7. Appropriate correction is required
- 4. Claim 10 is objected to because of the following informalities: The acronym for first "SIC" and "PIC" need to be spelled out when it is used first time in each independent or subsequent dependent claim. Appropriate correction is required

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 2-4, 10, and 12-15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 7. Claim 2 recites the limitation "the equalizer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Application/Control Number: 10/570,053

Art Unit: 4154

8. Claim 3 recites the limitation "the equalizer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Page 4

- 9. Claim 4 recites the limitation "the equalizer" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 10. Claim 10 recites the limitation "said device" in line 3. There is insufficient antecedent basis for this limitation in the claim.
- 11. Claim 10 recites the limitation "the subtracted data" in line 7. There is insufficient antecedent basis for this limitation in the claim.
- 12. Claim 10 recites the limitation "the subtractor" in line 13. There is insufficient antecedent basis for this limitation in the claim.
- 13. Claim 12 recites the limitation "the subtracted data" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- 14. In claims 12-13, applicant has claimed both an apparatus and the process of using the apparatus and it is indefinite (See MPEP 2173.05(P)). Claims 12-13 recites "method comprising" whereas the parent claim 9 recites "the apparatus" which directed to structural limitation. Therefore, it is unclear how a "characterized method" constitutes in an "iterative decoder and equalizer".
- 15. Claim 13 recites the limitation "the decision algorithm" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- 16. Claim 14 recites the limitation "the subtracted data" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Application/Control Number: 10/570,053 Page 5

Art Unit: 4154

17. Claim 14 recites the limitation "the decision algorithm" in line 3. There is insufficient antecedent basis for this limitation in the claim.

18. In claims 10-15, it is not clear what method steps applicant is claiming. Method claims should be represented by clear active steps that specify the steps to performing the method. They should not state results of the steps but rather the active steps to achieving the results.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNG AHN whose telephone number is (571)270-3706. The examiner can normally be reached on Monday-Friday, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/570,053 Page 6

Art Unit: 4154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SUNG AHN/ Examiner AU 2611 (571)-270-3706 sung.ahn@uspto.gov

/Kenneth N Vanderpuye/ Supervisory Patent Examiner, Art Unit 2613